

## II. REMARKS

In the Office Action mailed on December 19, 2006, the Examiner: (1) objected to claims 17 and 23 because of informalities; (2) rejected claims 1-5, 7-9, 11-13, 15, 17, 18, 21, and 27-29 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent 6,791,997 to Beyer et al. (hereinafter "the '997 patent"); (3) rejected claims 6 and 22-25 as being unpatentable over the '997 patent in view of U.S. Patent Publication 2003/0026267 A1 to Oberman et al. (hereinafter "Oberman"); and (4) indicated that claims 10, 14, 16, 19, 20, and 26 would be allowable if rewritten in independent form including all limitations of their base claims and any intervening claims. (Office Action, pages 2-3 and 7-9) Applicants thank the Examiner for indicating the allowable subject matter.

On February 19, 2007, Applicants' agent telephoned the Examiner because the citations to the '997 patent did not correspond the subject matter recited in the Office Action mailed on December 19, 2006. The Examiner replied that the citation to the '997 patent was an error and that the 35 U.S.C. §§ 102(e) and 103(a) rejections are based on the U.S. Patent Application Publication 2006/0104301 A1 to Beyer et al. (hereinafter "Beyer") rather than the '997 patent to Beyer. Applicants thank the Examiner for clarifying the error.

Applicants' responses to the Examiner's objections and rejections are set forth below.

### A. Response to Examiner's Objection to Claim 17

Applicants have amended claim 17 to correct a typographical error. In particular, Applicants have replaced "species" with "specifies" so that currently amended claim 17 recites, "The node of claim 11, wherein the schedule species specifies a transmit order for the plurality of nodes."

### B. Response to Examiner's Objection to Claim 23

Applicants have amended claim 23 to further clarify the claim language. In particular, currently amended claim 23 recites, "The network of claim 21, wherein at least one node, when the at least one node has been invited to transmit transmits, drops a time-critical frame that is not expected to be received at a destination node in a specified time period." Applicants submit that the clarifying amendment neither broadens nor limits the scope of the original claim and that the specification supports the subject matter of the original and currently amended claim in various locations in the drawings and written description, including, e.g., Fig. 4B and paragraphs [0040] – [0046].

**C. Applicants' Response to Examiner's Rejections Under 35 U.S.C. § 102(e)**

Applicants submit that the Examiner's rejections under 35 U.S.C. § 102(e) are improper and should be withdrawn because the Beyer reference does not show or suggest each and every element recited in the pending claims for at least the reasons set forth below.

**1. Claims 1-26**

Of claims 1-26, claims 1, 11, and 21 are independent. Claim 1 recites, *inter alia*, "inviting the next node to transmit a next burst" and Claims 11 and 21 each recite, *inter alia*, "invites the next node to transmit a next burst." In contrast to Applicants' claimed invention, Beyer does not invite a next node to transmit a next burst because in Beyer's disclosed protocol, "network synchronization [is] tightly integrated with MAC scheduling" to allow for "non-negotiated, collision-free transmission scheduling." (Beyer, paragraph [0043]) Indeed, Beyer specifically states that "[c]ollision avoidance for contended slots is achieved without requiring any real-time communication between nodes" and that the nodes in Beyer's disclosed system "need only know their own 2-hop neighborhood and have some agreement on the Network Age." (Beyer, paragraph [0067]) Thus, according to Beyer's disclosed protocol, a node does not "[invite] a next node to transmit a next burst" as recited in Applicants' claims 1, 11, and/or 21 because after node initialization and registration with the network, the nodes in Beyer do not negotiate or communicate with one another to schedule transmissions. Therefore, Applicants submit that claims 1, 11, and 21 are patentable over Beyer for at least the reason that Beyer does not show or suggest "inviting a next node to transmit a next burst" as recited in claim 1 or "invites a next node to transmit a next burst" as recited in claims 11 and 21.

Claims 2-10 depend from claim 1, claims 12-20 depend from claim 11, and claims 22-26 depend from claim 21. Accordingly, Applicants further submit that claims 2-10, 12-20, and 22-26 are allowable for at least the reason that they depend from an allowable claim.

**2. Claims 27, 28, and 29**

Claims 27, 28, and 29 are each independent claims. Claims 27 and 29 recite, *inter alia*, "allowing an out-of-order node to transmit out of the transmit order when the receiver is otherwise idle" and claim 28 recites, *inter alia*, "allows an out-of-order node to transmit out of the transmit order when the receiver is otherwise idle." In contrast to Applicants' claimed invention, Beyer does not allow an out-of-order node to transmit out of the transmit order when the receiver is otherwise

idle because in Beyer's disclosed protocol, "packets for transmission ...[are] scheduled in a predictable, collision-free manner...after the network has stabilized." (Beyer, paragraph [0043]) Beyer's disclosed protocol does provide a priority mechanism where "by communicating an optional 'priority basis' specific to each node, the frequency of...transmissions can be gradually tuned according to a node's [capabilities or requirements]." (Beyer, paragraph [0045]) However, rather than allowing a node to transmit out of order, Beyer's priority mechanism alters the transmission schedule over time so that nodes having greater traffic priority can obtain more time slots in the transmission schedule. Therefore, Applicants submit that claims 27, 28 and 29 are patentable over Beyer for at least the reason that Beyer does not show or suggest "allowing an out-of-order node to transmit out of the transmit order when the receiver is otherwise idle" as recited in claim 28 or "allows an out-of-order node to transmit out of the transmit order when the receiver is otherwise idle" as recited in claims 27 and 29.

#### D. Applicants' Response to Examiner's Rejections Under 35 U.S.C. § 103(a)

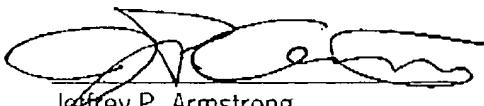
Applicants submit that the Examiner's rejections of claims 6 and 22-25 under 35 U.S.C. § 103(a) are improper and should be withdrawn because the combination of Beyer and Oberman does not show or suggest each and every element recited in the claims. Claim 6 depends from claim 1 and claims 22-25 depend from claim 21. The combination of Beyer and Oberman does not show or suggest each and every element in claims 6 and 22-25 for at least the reason that Beyer does not show or suggest "inviting a next node to transmit a next burst" as recited in claim 1 or "invites a next node to transmit a next burst" as recited in claim 21 as set forth in Section II-C-1, *supra*.

#### II. CONCLUSION

Applicants submit that the present application is in condition for allowance, and notice to that effect is hereby requested. Should the Examiner feel that further dialog would advance the subject application to issuance, the Examiner is invited to telephone the undersigned at (312) 913-2104.

Respectfully submitted,  
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